

IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A computer-implemented method for creating a graphical program, the method comprising:

receiving user input [[specifying]] selecting one or more nodes to include in the graphical program from at least one first palette, wherein the at least one first palette presents a plurality of all available nodes for selection;

including the one or more [[specified]] selected nodes in the graphical program;
and

[[providing]] displaying one or more suggested nodes to include in the graphical program in a second palette, based on the one or more nodes [[specified]] selected by the user input, wherein the second palette is separate from the at least one first palette, and wherein the one or more suggested nodes are selectable by the user for inclusion in the graphical program.

2. (Original) The method of claim 1,
wherein the graphical program comprises a block diagram portion and a user interface portion.

3. (Original) The method of claim 1,
wherein the graphical program comprises a graphical data flow program.

4. (Original) The method of claim 1, further comprising:
interconnecting nodes included in the graphical program to visually indicate functionality of the graphical program.

5 - 6. (Cancelled)

7. (Currently Amended) The method of claim [[5]] 1,
wherein said displaying the one or more suggested nodes comprises displaying
the one or more suggested nodes as shadow nodes that follow a mouse cursor.

8. (Original) The method of claim 1, further comprising:
receiving user input requesting to include a first suggested node in the graphical
program; and
including the first suggested node in the graphical program.

9. (Original) The method of claim 1, further comprising:
automatically including the one or more suggested nodes in the graphical
program.

10. (Original) The method of claim 1, further comprising:
determining the one or more suggested nodes.

11. (Currently Amended) The method of claim 10,
wherein said determining the one or more suggested nodes comprises determining
that the one or more suggested nodes are necessary to complete an operation performed
by the one or more nodes [[specified]] selected by the user input.

12. (Currently Amended) The method of claim 10,
wherein said determining the one or more suggested nodes comprises performing
an algorithm to determine the one or more suggested nodes based on the one or more
nodes [[specified]] selected by the user input.

13. (Currently Amended) The method of claim 12,
wherein the algorithm is hard-coded to always determine the one or more
suggested nodes in response to the one or more nodes [[specified]] selected by the user
input.

14. (Currently Amended) The method of claim 12,
wherein the algorithm is operable to determine the one or more suggested nodes based on previously stored data regarding nodes that frequently occur in graphical programs along with the one or more nodes [[specified]] selected by the user input.

15. (Currently Amended) The method of claim 10,
wherein said determining the one or more suggested nodes comprises determining that the one or more suggested nodes frequently appear in graphical programs that include the one or more [[specified]] selected nodes.

16. (Currently Amended) The method of claim 10,
wherein said determining the one or more suggested nodes comprises performing an artificial intelligence heuristic to determine the one or more suggested nodes based on the one or more nodes [[specified]] selected by the user input.

17. (Currently Amended) The method of claim 1, further comprising:
receiving user input specifying suggestion criteria;
determining the one or more suggested nodes based on the one or more nodes [[specified]] selected by the user input and based on the suggestion criteria.

18. (Original) The method of claim 1,
wherein the graphical program is operable to perform one or more of:
an industrial automation function;
a process control function;
a test and measurement function.

19. (Currently Amended) A memory medium for creating a graphical program,
the memory medium comprising program instructions executable to:

receive user input [[specifying]] selecting one or more nodes to include in the graphical program from at least one first palette, wherein the at least one first palette presents a plurality of all available nodes for selection;

include the one or more [[specified]] selected nodes in the graphical program in a second palette; and

[[providing]] displaying one or more suggested nodes to include in the graphical program, based on the one or more nodes [[specified]] selected by the user input, wherein the second palette is separate from the at least one first palette, and wherein the one or more suggested nodes are selectable by the user for inclusion in the graphical program.

20. (Original) The memory medium of claim 19,
wherein the graphical program comprises a block diagram portion and a user interface portion.

21. (Original) The memory medium of claim 19,
wherein the graphical program comprises a graphical data flow program.

22 – 23. (Cancelled)

24. (Original) The memory medium of claim 19, further comprising program instructions executable to:

receive user input requesting to include a first suggested node in the graphical program; and

include the first suggested node in the graphical program.

25. (Original) The memory medium of claim 19, further comprising program instructions executable to:

automatically include the one or more suggested nodes in the graphical program.

26. (Original) The memory medium of claim 19, further comprising program instructions executable to:

determine the one or more suggested nodes.

27. (Currently Amended) The memory medium of claim 26,
wherein said determining the one or more suggested nodes comprises determining that the one or more suggested nodes are necessary to complete an operation performed by the one or more nodes [[specified]] selected by the user input.

28. (Currently Amended) The memory medium of claim 26,
wherein said determining the one or more suggested nodes comprises performing an algorithm to determine the one or more suggested nodes based on the one or more nodes [[specified]] selected by the user input.

29. (Currently Amended) The memory medium of claim 26,
wherein said determining the one or more suggested nodes comprises determining that the one or more suggested nodes frequently appear in graphical programs that include the one or more [[specified]] selected nodes.

30. (Currently Amended) The memory medium of claim 26,
wherein said determining the one or more suggested nodes comprises performing an artificial intelligence heuristic to determine the one or more suggested nodes based on the one or more nodes [[specified]] selected by the user input.

31. (Currently Amended) A system for creating a graphical program, the system comprising:

a memory medium storing program instructions;

a processor;

wherein the processor is operable to execute the program instructions to:

receive user input specifying one or more nodes to include in a graphical program from at least one first palette, wherein the at least one first palette presents a plurality of all available nodes for selection;

include the one or more [[specified]] selected nodes in the graphical program; and

display one or more suggested nodes to include in the graphical program in a second palette, based on the one or more nodes [[specified]] selected by the user input, wherein the second palette is separate from the at least one first palette, and wherein the one or more suggested nodes are selectable by the user for inclusion in the graphical program.

32. (Original) The system of claim 31, wherein the processor is further operable to execute the program instructions to:

receive user input requesting to include a first suggested node in the graphical program; and

include the first suggested node in the graphical program.

33. (Cancelled)

34. (Currently Amended) A computer-implemented method for creating a graphical program, the method comprising:

displaying a graphical programming window for creating a graphical program;

displaying one or more nodes in the window in response to user input selecting the one or more nodes from at least one first palette, wherein the at least one first palette presents a plurality of all available nodes for selection;

determining one or more suggested nodes in response to the user input; and

displaying the one or more suggested nodes in a second palette, wherein the second palette is separate from the at least one first palette, and wherein the one or more suggested nodes are selectable by the user for inclusion in the graphical program.

35. (Original) A computer-implemented method for creating a graphical user interface for a graphical program, the method comprising:

displaying a window for creating the graphical user interface for the graphical program;

displaying one or more user interface elements in the window in response to user input;

determining one or more suggested user interface elements in response to the user input; and

displaying the one or more suggested user interface elements.

36. (Currently Amended) A computer-implemented method for creating a script, the method comprising:

receiving user input ~~[[specifying]]~~ selecting one or more steps to include in the script from at least one first palette, wherein the at least one first palette presents a plurality of all available steps for selection;

including the one or more ~~[[specified]]~~ selected steps in the script; and

~~[[providing]]~~displaying one or more suggested steps to include in the script in a second palette, based on the one or more steps [[specified]] selected by the user input, wherein the second palette is separate from the at least one first palette, and wherein the one or more suggested nodes are selectable by the user for inclusion in the graphical program.

37. (Original) The method of claim 36,

wherein the steps comprise image processing steps;

wherein the script is operable to perform an image processing process.

38. (New) A computer-implemented method for creating a graphical program, the method comprising:

receiving user input selecting one or more nodes to include in the graphical program from at least one first palette, wherein the at least one first palette presents a plurality of all available nodes for selection;

including the one or more selected nodes in the graphical program;

determining one or more suggested nodes to include in the graphical program, based on the one or more nodes selected by the user input; and

displaying the one or more suggested nodes as shadow nodes that follow a mouse cursor, wherein the one or more suggested nodes are selectable by the user for inclusion in the graphical program.

39. (New) A memory medium for creating a graphical program, the memory medium comprising program instructions executable to:

receive user input selecting one or more nodes to include in the graphical program from at least one first palette, wherein the at least one first palette presents a plurality of all available nodes for selection;

include the one or more selected nodes in the graphical program;

determine one or more suggested nodes to include in the graphical program, based on the one or more nodes selected by the user input; and

display the one or more suggested nodes as shadow nodes that follow a mouse cursor, wherein the one or more suggested nodes are selectable by the user for inclusion in the graphical program.

40. (New) A computer-implemented method for creating a graphical program, the method comprising:

receiving user input selecting one or more nodes to include in the graphical program from at least one first palette, wherein the at least one first palette presents a plurality of all available nodes for selection;

including the one or more selected nodes in the graphical program;

determining one or more suggested nodes to include in the graphical program, based on the one or more nodes selected by the user input; and

providing audio suggestions indicating the one or more suggested nodes, wherein one or more suggested nodes are selectable by the user for inclusion in the graphical program.

41. (New) A memory medium for creating a graphical program, the memory medium comprising program instructions executable to:

receive user input selecting one or more nodes to include in the graphical program from at least one first palette, wherein the at least one first palette presents a plurality of all available nodes for selection;

include the one or more selected nodes in the graphical program;

determine one or more suggested nodes to include in the graphical program, based on the one or more nodes selected by the user input; and

provide audio suggestions indicating the one or more suggested nodes, wherein one or more suggested nodes are selectable by the user for inclusion in the graphical program.

42. (New) A computer-implemented method for creating a graphical program, the method comprising:

receiving user input selecting one or more nodes to include in the graphical program from at least one first palette, wherein the at least one first palette presents a plurality of all available nodes for selection;

including the one or more selected nodes in the graphical program;

determining one or more suggested nodes to include in the graphical program, based on the one or more nodes selected by the user input; and

including the one or more suggested nodes in the graphical program, wherein the one or more suggested nodes are selectable by the user for removal from the graphical program.

43. (New) A memory medium for creating a graphical program, the memory medium comprising program instructions executable to:

receiving user input selecting one or more nodes to include in the graphical program from at least one first palette, wherein the at least one first palette presents a plurality of all available nodes for selection;

including the one or more selected nodes in the graphical program;

determining one or more suggested nodes to include in the graphical program, based on the one or more nodes selected by the user input; and

including the one or more suggested nodes in the graphical program, wherein the one or more suggested nodes are selectable by the user for removal from the graphical program.

44. (New) A computer-implemented method for creating a graphical program, the method comprising:

receiving user input selecting one or more nodes to include in the graphical program from at least one first palette, wherein the at least one first palette presents a plurality of all available nodes for selection;

including the one or more selected nodes in the graphical program;

displaying one or more suggested nodes to include in the graphical program in a second palette, based on the one or more nodes selected by the user input, wherein the second palette is separate from the at least one first palette, and wherein the one or more suggested nodes are selectable by the user for inclusion in the graphical program;

displaying a window for creating a graphical user interface for the graphical program;

displaying one or more user interface elements in the window in response to user input;

determining one or more suggested user interface elements in response to the user input; and

displaying the one or more suggested user interface elements, wherein the one or more suggested user interface elements are selectable by the user for inclusion in the graphical program.

45. (New) A memory medium for creating a graphical program, the memory medium comprising program instructions executable to:

receive user input selecting one or more nodes to include in the graphical program from at least one first palette, wherein the at least one first palette presents a plurality of all available nodes for selection;

include the one or more selected nodes in the graphical program;

display one or more suggested nodes to include in the graphical program in a second palette, based on the one or more nodes selected by the user input, wherein the second palette is separate from the at least one first palette, and wherein the one or more suggested nodes are selectable by the user for inclusion in the graphical program;

display a window for creating a graphical user interface for the graphical program;

display one or more user interface elements in the window in response to user input;

determine one or more suggested user interface elements in response to the user input; and

display the one or more suggested user interface elements, wherein the one or more suggested user interface elements are selectable by the user for inclusion in the graphical program.

46. (New) A computer-implemented method for creating a graphical program, the method comprising:

receiving user input selecting one or more nodes to include in the graphical program from at least one first graphical user interface, wherein the at least one first graphical user interface presents a plurality of all available nodes for selection;

including the one or more selected nodes in the graphical program; and

displaying one or more suggested nodes to include in the graphical program in a second graphical user interface, based on the one or more nodes selected by the user input, wherein the second graphical user interface is separate from the at least one first graphical user interface, and wherein the one or more suggested nodes are selectable by the user for inclusion in the graphical program.

47. (New) The method of claim 46, wherein the at least one first graphical user interface and/or the second graphical user interface comprises one or more of:

a palette;

a menu;

buttons;
checkboxes;
a list box;
a graph; and
a shadow node display that follows a mouse cursor.

48. (New) The method of claim 46, further comprising:
receiving user input requesting to include a first suggested node in the graphical program; and
including the first suggested node in the graphical program.

49. (New) The method of claim 46, further comprising:
automatically including the one or more suggested nodes in the graphical program.

50. (New) The method of claim 46, further comprising:
determining the one or more suggested nodes.

51. (New) The method of claim 50,
wherein said determining the one or more suggested nodes comprises determining that the one or more suggested nodes are necessary to complete an operation performed by the one or more nodes selected by the user input.

52. (New) The method of claim 50,
wherein said determining the one or more suggested nodes comprises determining that the one or more suggested nodes frequently appear in graphical programs that include the one or more selected nodes.

53. (New) The method of claim 50,

wherein said determining the one or more suggested nodes comprises performing an artificial intelligence heuristic to determine the one or more suggested nodes based on the one or more nodes selected by the user input.

54. (New) A memory medium for creating a graphical program, the memory medium comprising program instructions executable to:

receive user input selecting one or more nodes to include in the graphical program from at least one first graphical user interface, wherein the at least one first graphical user interface presents a plurality of all available nodes for selection;

include the one or more selected nodes in the graphical program; and

display one or more suggested nodes to include in the graphical program in a second graphical user interface, based on the one or more nodes selected by the user input, wherein the second graphical user interface is separate from the at least one first graphical user interface, and wherein the one or more suggested nodes are selectable by the user for inclusion in the graphical program.

55. (New) A computer-implemented method for creating a graphical program, the method comprising:

receiving user input selecting one or more nodes to include in the graphical program from at least one graphical user interface, wherein the at least one graphical user interface presents a plurality of all available nodes for selection;

including the one or more selected nodes in the graphical program; and

displaying one or more suggested nodes to include in the graphical program in a palette, based on the one or more nodes selected by the user input, wherein the palette is separate from the at least one graphical user interface, and wherein the one or more suggested nodes are selectable by the user for inclusion in the graphical program.